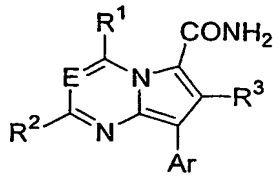
CLAIMS

1. A pyrrolopyrimidine or pyrrolotriazine derivative substituted with a carbamoyl group represented by the following formula [I]:



[I]

(wherein E is N or CR^{10};

R^1 is $-OR^4$, $-S(O)_lR^4$ or $-NR^4R^5$;

R^2 is hydrogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, C_{3-7}cycloalkyl-C_{1-6}alkyl, halogen, C_{1-6}alkoxy, C_{3-7}cycloalkyloxy, C_{1-6}alkylthio or $-N(R^6)R^7$;

R^3 is hydrogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, C_{3-7}cycloalkyl-C_{1-6}alkyl or aryl;

R^4 and R^5 are the same or different, and independently hydrogen, C_{1-9}alkyl, C_{3-7}cycloalkyl, C_{3-7}cycloalkyl-C_{1-6}alkyl, di(C_{3-7}cycloalkyl)-C_{1-6}alkyl, C_{1-6}alkoxy-C_{1-6}alkyl, di(C_{1-6}alkoxy)-C_{1-6}alkyl, hydroxy-C_{1-6}alkyl, cyano-C_{1-6}alkyl, carbamoyl-C_{1-6}alkyl or di(C_{1-6}alkyl)amino-C_{2-6}alkyl; or R^4 and R^5 are taken together to form $-(CH_2)_m$-A-$(CH_2)_n$- wherein A is methylene, oxygen, sulfur, NR^8 or CHR^9;

R^6 and R^7 are the same or different, and independently hydrogen or C_{1-6}alkyl;

R^8 is hydrogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, aryl or aryl-C_{1-6}alkyl;

R^9 is hydrogen, hydroxy, hydroxy-C_{1-6}alkyl, cyano or cyano-C_{1-6}alkyl;

R^{10} is hydrogen, halogen or C_{1-6}alkyl;

l is an interger selected from 0, 1 and 2;

m is an integer selected from 1, 2, 3 and 4;

n is an integer selected from 0, 1, 2 and 3;

with the proviso, when A is oxygen, sulfur or NR^8, then n is 1, 2 or 3;

Ar is aryl or heteroaryl which aryl or heteroaryl is unsubstituted or substituted with 1 or more substituents, which are the same or different, selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, C_{2-6}alkenyl, C_{2-6}alkynyl, C_{1-6}alkoxy, C_{1-6}alkylthio, C_{1-6}alkylsulfinyl, C_{1-6}alkylsulfonyl, cyano, nitro, hydroxy, $-CO_2R^{11}$, $-C(=O)R^{12}$, $-CONR^{13}R^{14}$, $-OC(=O)R^{15}$, $-NR^{16}CO_2R^{17}$, $-S(=O)_rNR^{18}R^{19}$, trifluoromethyl, trifluoromethoxy, difluoromethoxy, fluoromethoxy

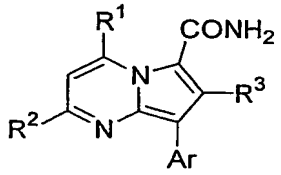
and -N(R^{20})R^{21};

R^{11} and R^{17} are the same or different, and independently are hydrogen, C_{1-5}alkyl, C_{3-8}cycloalkyl, C_{3-8}cycloalkyl-C_{1-5}alkyl, aryl or aryl-C_{1-5}alkyl;

R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{18}, R^{19}, R^{20} and R^{21} are the same or different, and independently are hydrogen, C_{1-5}alkyl or C_{3-8}cycloalkyl;

r is 1 or 2), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

2. The pyrrolopyrimidine derivative substituted with a carbamoyl group according to claim 1 represented by the following formula [II]:



[II]

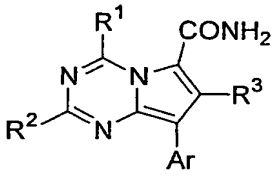
(wherein R^1, R^2, R^3 and Ar are as defined in claim 1), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

3. The pyrrolopyrimidine derivative substituted with a carbamoyl group according to claim 2 represented by the formula [II], wherein R^1 is -OR^4 or -NR^4R^5; R^2 is C_{1-6}alkyl; R^3 is hydrogen or C_{1-6}alkyl; R^4 and R^5 are the same or different, and independently hydrogen, C_{1-9}alkyl, C_{3-7}cycloalkyl, C_{3-7}cycloalkyl-C_{1-6}alkyl, di(C_{3-7}cycloalkyl)-C_{1-6}alkyl, C_{1-6}alkoxy-C_{1-6}alkyl, di(C_{1-6}alkoxy)-C_{1-6}alkyl, hydroxy-C_{1-6}alkyl or cyano-C_{1-6}alkyl; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen, C_{1-3}alkyl, C_{1-3}alkoxy, C_{1-3}alkylthio, trifluoromethyl, trifluoromethoxy and –N(R^{20})R^{21} (wherein R^{20} and R^{21} are the same or different, and independently are hydrogen or C_{1-3}alkyl), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

4. The pyrrolopyrimidine derivative substituted with a carbamoyl group

according to claim 2 represented by the formula [II], wherein R^1 is $-OR^4$ or $-NR^4R^5$; R^2 is C_{1-6}alkyl; R^3 is hydrogen or C_{1-6}alkyl; R^4 is C_{1-9}alkyl, C_{3-7}cycloalkyl, C_{3-7}cycloalkyl-C_{1-6}alkyl, di(C_{3-7}cycloalkyl)-C_{1-6}alkyl, C_{1-6}alkoxy-C_{1-6}alkyl, di(C_{1-6}alkoxy)-C_{1-6}alkyl, hydroxy-C_{1-6}alkyl or cyano-C_{1-6}alkyl; R^5 is hydrogen; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen and C_{1-3}alkyl, individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

5. The pyrrolotriazine derivative substituted with a carbamoyl group according to claim 1 represented by the following formula [III]:



[III]

(wherein R^1, R^2, R^3 and Ar are as defined in claim 1), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

6. The pyrrolotriazine derivative substituted with a carbamoyl group according to claim 5 represented by the formula [III], wherein R^1 is $-OR^4$ or $-NR^4R^5$; R^2 is C_{1-6}alkyl; R^3 is hydrogen or C_{1-6}alkyl; R^4 and R^5 are the same or different, and independently hydrogen, C_{1-9}alkyl, C_{3-7}cycloalkyl, C_{3-7}cycloalkyl-C_{1-6}alkyl, di(C_{3-7}cycloalkyl)-C_{1-6}alkyl, C_{1-6}alkoxy-C_{1-6}alkyl, di(C_{1-6}alkoxy)-C_{1-6}alkyl, hydroxy-C_{1-6}alkyl or cyano-C_{1-6}alkyl; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen, C_{1-3}alkyl, C_{1-3}alkoxy, C_{1-3}alkylthio, trifluoromethyl, trifluoromethoxy and $-N(R^{20})R^{21}$ (wherein R^{20} and R^{21} are the same or different, and independently are hydrogen or C_{1-3}alkyl), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

7. The pyrrolotriazine derivative substituted with a carbamoyl group according to claim 5 represented by the formula [III], wherein R^1 is $-OR^4$ or $-NR^4R^5$; R^2 is C_{1-6}alkyl; R^3 is hydrogen or C_{1-6}alkyl; R^4 is C_{1-9}alkyl, C_{3-7}cycloalkyl, C_{3-7}cycloalkyl-C_{1-6}alkyl, di(C_{3-7}cycloalkyl)-C_{1-6}alkyl, C_{1-6}alkoxy-C_{1-6}alkyl, di(C_{1-6}alkoxy)-C_{1-6}alkyl, hydroxy-C_{1-6}alkyl or cyano-C_{1-6}alkyl; R^5 is hydrogen; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen and C_{1-3}alkyl, individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

8. An antagonist for CRF receptors, comprising a pyrrolopyrimidine or pyrrolotriazine derivative substituted with a carbamoyl group, a pharmaceutically acceptable salt thereof or its hydrate according to any one of claims 1 to 7, as an active ingredient.

9. Use of a pyrrolopyrimidine or pyrrolotriazine derivative substituted with a carbamoyl group, a pharmaceutically acceptable salt thereof or its hydrate according to any one of claim 1 to 7, for the manufacture of a therapeutic agent as an antagonist for CRF receptors.